

RCRA



555464

AD03

7530-00-274-5494

FEDERAL SUPPLY SERVICE
(GPO)

Site Contacts

Andrew Koff - Golder

603-244-8677

Jim Peace - Golder

603-668-0880

Electrolux Site Visit

10-21-15

Jefferson, IA

0642 Arrive at office

0715 Leave office

1230 Arrive on site. Andrew Koff w/ Golder Driller's at Lunch. They are about to set Casing on 1st hole.

Drillers are Cascade Drilling out of Minnesota & WI

* Michael Goldstein
 Thursday - It's surface for dev.
 → Thursday
 Jim Peace - 3:45 Friday
 * - 603-668-0880

M. H. - * Andrew Koff
 → 603-244-
 8677
 Enclosed diagram
 310-668-2134

Tues Wed Thurs -
 Tom Winkle

Currently working on MW-67 to drinking water area
 Photos:

- 1) Core from MW 67 outer casing 0-80'
- 2) Top of yellow-brown till ~ 43'. Sand lens at top
- 3) 6" sand lens at ~ 74'
- 4) DK Gray black till at ~ 66'
- 5) Iron stain mottling in yellow brown/grey till ~ 58'
- 6) Thin Fe stained sand lens in yellow brown till ~ 51'
- 7) Yellow brown/Grey till contact ~ 64-65'
- 8) Upper Grey till / yellow brown till contact ~ 40' ±
 upper part yellow brown (lt grey) till w/ silty, sandy
 at top where color is tan to ln grey.
 Deeper in yellow brown till get more clay w/
 sand lenses or sand filled fractures w/ Fe stain.
 Secondary porosity?
- 9) Grey upper till at ~ 26'. (~ 10' down from
 sandy loam contact). High clay content
 w/ silt & gravel
- 10) Roto Sante Rig pulling outer casing.

10-21-15

(Photos log)

11. Facility looking North
12. MW-60 Looking SE
13. MW-60 concrete pad - undermining, erosion.
14. Facility looking North from outside fence betw MW58 / MW60
15. " " NE from same location at 14.
16. MW 64 Looking East
17. MW 64 looking East; Concrete Pad damaged
18. Facility looking N. toward MW-57 & MW 14.
19. MW-57 - damaged concrete pad.
20. MW-56 S & D and MW-51 looking N along east Fence.
21. Looking NW toward MW18 at depression holding water (looks like filled well location) or sump?
22. Looking SW from depression discussed above.
Drilling boreholes patched w/ concrete west of Equipment scars. Drum rings on concrete.
Drum rings located S. of boring holes.
23. & 24. Culvert Drain exiting East Fence line by gate near MW 63
25. Looking SE. Grate in employee parking lot potentially going to drain pipe by Gate
26. Storage type area NE corner of Bldg. (Not really shown on Figure). Raised cubs, concrete is cut & filled Large square on S end, sm square on N. end. Drum ring stains
27. Looking NE at storage area described above From MW 24

5:30 start drilling MW 66.

Collect core down to 29' & log it.

6:05 I leave site. Drillers still working

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10-22-15

07:35 Arrive on site.

Drillers have completed setting 10" casing down to 29'.

Setting 6" casing inside 10" & grouting it in place.

10:30 Moving back to MW-67 location.

12:00 Everything D-connected & set up
Break for Lunch

12:30 back on site & ready to start drilling.
Upper 80' cased off on wed.

14:20 Finally get through granitic cobble/rock at ~81'. Grey clay w/ Fe stained laminations & v. fine sand below the cobble.

15:00 Hit sand at ~92', with laminated silts & very fine sands above to ~95'. Some clay also. Fe staining along laminae & also along vertical planes/fractures.

0.2 ppm Pb reading in 85-90' 80-85'
(migrated on bag initially)

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10-22-15

Photo Log (cont.)

28. ⁰⁸⁹⁵ 80-81' granitic cobble w/ grey laminated clay
29. Close up of laminated clay above.
30. 95-85' core ^{Up to 1078'}
31. ^{DSCN0896} 92-95' - sand
32. 87-92' - v. fine sand & silt laminations w/clay
33. 85~90? - silty laminations w/clay
34. 87-92' w/ 90' marked
35. ^{DSCN0901} 86-88' - vertical Fe stained fractures,
36. ⁽⁴⁾ 104.5' - Black till beneath ~6-10' of sand
37. ~97' - Contact between base of sand and
^{DSCN0904} dk grey till beneath it. There is Gravel
100' at the contact.
38. ~95-105' - Sand to ^{dk} grey till contact w/ Fe stained till
39. ~98'-105' - DK grey till below sand.
^{DSCN0908}

16:30 - Decided to screen the well from '87 to '97 feet. Bolder asked if I agreed, I told him I thought that made sense based on what we were seeing but I was not going to "approve" well construction since I did not get to review and approve a Workplan/QAPP.

It is unclear if the DK Grey till is within the Pleistocene Alluvium drinking water Aquifer or above the bedrock which is supposed to be shale, coal, limestone layers.

The dark grey Till below the sand seems more massive than that above the sand. There is some reddish brown Fe staining in the upper 2-3'. The pebble sized clasts seem to be rounded ss. of silt. Less igneous, gtz clasts potentially

Therefore it is unclear if the sand zone extends continuously under the facility or not. If it does not then this well will not tell us if the aquifer is impacted, necessitated

There is about 3' of v. fine sand & silt layers with strong Fe staining above ~6' of sand, then an inch or 2 of gravel then the dk grey till (which is brownish from Fe staining in upper 2-3'

17:15 Leave site while they set MW-67

40. DSCN0909

41 } Grey/Tan till contact at 33'.

42

43 Core from MW 66 down to 55'.
29-35, 35-45, 45-55.

44 'Peaty' transition between Tan Brown & Grey till

45 Core 45-55' & 55-65'

DSCN0914

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10-23-15

6:45 Checking emails, downloading photos,
reviewing reports.

8:30 Arrive on site. Raining. They are pulling
the first core, 29-35', see black till/
Grey Brown till contact at 33'.
MW 64 set at 33-38' BLS based on
that contact.

11:00 Raining. Finally got 45-55', still in
Yellow Brown till; silty, very fine sand, and
clay. Alternates amount of clay. Clayey
zones have vertical planar iron staining.
Going down 10 more feet in MW hole.

1145 Decide to set 10' screen 45-55'
which seems to have more fine sand/silt.
55 to 58 is Tan/Brown till but with more
clay. At ~58 get grey (similar to grey
in Tan/Brown till but without the grey brown).
Then ~60 ± 1' get dk Brown organic
content (peaty). At ~62 get Grey till,
(not as dk as expected) but more
plastic clay w/ No Fe staining.